

ENVIRONMENTAL NOTIFICATION FORM

RUNWAY 5/23 SAFETY AREA IMPROVEMENTS

**LAURENCE G. HANSCOM FIELD
BEDFORD, MASSACHUSETTS**

Submitted by:



**Massachusetts Port Authority
One Harborside Drive
East Boston, MA 02129**

Prepared by:



**McFarland-Johnson, Inc.
10 Ferry Street, Unit 11
Concord, NH 03301**

In Association with:



**Wetlands & Wildlife, Inc.
409 Massachusetts Avenue
Acton, MA 01720**

July, 2005

RUNWAY 5/23 SAFETY AREA IMPROVEMENTS

**LAURENCE G. HANSCOM FIELD
BEDFORD, MASSACHUSETTS**

TABLE OF CONTENTS

ENVIRONMENTAL NOTIFICATION FORM (ENF)

FIGURES

- Location Map
- Overall Site Plan
- Runway 5 Existing Conditions Plan
- Runway 5 Grading Plan
- Runway 23 Existing Conditions Plan
- Runway 23 Site Plan
- Runway 23 Grading Plan
- Typical Sections

SUPPLEMENTAL DOCUMENTATION

1.0 PROJECT DESCRIPTION

- 1.1 Background and Need for Project
- 1.2 FAA Design Requirements
- 1.3 Description of Project Area
- 1.4 Existing Project Site Conditions
- 1.5 Identification and Evaluation of Alternatives
- 1.6 Proposed Improvements
- 1.7 Potential Mitigation Measures

2.0 WETLANDS, WATERWAYS, AND TIDELANDS

- 2.1 MEPA Thresholds
- 2.2 Wetland Resource Delineation/Confirmation and Existing Resource Conditions
 - 2.2.1 Resource Delineation/Confirmation
 - 2.2.2 Existing Wetland Resource Conditions
 - 2.2.2.1 Vegetated Wetlands
 - 2.2.2.2 Other Wetland Resources
 - 2.2.3 Wetland Functional Assessment
 - 2.2.3.1 Federal Functions/Values

- 2.2.3.2 Statutory Interests – MA Wetlands Protection Act/Regulations
- 2.3 Wetland Resources Impacts
 - 2.3.1 Wetland Resource Impact Area
 - 2.3.2 Wetland Functions/Values Impacts
- 2.4 Mitigation Measures
 - 2.4.1 Design and Construction Measures
 - 2.4.2 Wetland Compensation Plan
- 2.5 Regulatory Compliance
 - 2.5.1 Regulatory Programs of the U.S. Army Corps of Engineers and U.S. Environmental Protection Agency Section 404(b)(1) Guidelines
 - 2.5.2 MA Wetland Protection Act/Regulations

APPENDICES

- A** Required Permits
- B** ENF Circulation List
- C** Public Notice of Environmental Review
- D** FAA Letter Regarding Selected Alternative
- E** Grassland Management Plan

ENF Environmental Notification Form

For Office Use Only
Executive Office of Environmental Affairs

EOEA No.:
MEPA Analyst:
Phone: 617-626-

The information requested on this form must be completed to begin MEPA Review in accordance with the provisions of the Massachusetts Environmental Policy Act, 301 CMR 11.00.

Project Name: Hanscom Field Runway 5/23 Safety Area Improvements		
Street: N/A		
Municipality: Bedford/Concord/Lincoln	Watershed: Shawsheen River Basin (83)	
Universal Transverse Mercator Coordinates: N 15434978.2038, E 1022971.6082 (NAD 83)	Latitude: 42° - 28' - 14.90" Longitude: 071° - 17' - 21.60" (NAD 83)	
Estimated commencement date: Spring, 2007	Estimated completion date: Fall, 2007	
Approximate cost: \$1,350,000	Status of project design: 30 % complete	
Proponent: Massachusetts Port Authority (Massport)		
Street: Logan Office Center, Suite 200 South, 2 nd Floor, One Harborside Drive		
Municipality: East Boston	State: MA	Zip Code: 02128
Name of Contact Person From Whom Copies of this ENF May Be Obtained: Tom Ennis, Senior Project Manager		
Firm/Agency: Massport	Street: One Harborside Drive	
Municipality: East Boston	State: MA	Zip Code: 02128
Phone: (617) 568-3546	Fax: (617) 568-3518	E-mail: tennis@massport.com

Does this project meet or exceed a mandatory EIR threshold (see 301 CMR 11.03)?

Yes No

Project meets or exceeds mandatory EIR thresholds at 301 CMR 11.03(3)(a)1.a. (alteration of one or more acres of bordering vegetated wetlands) and 301 CMR 11.03(3)(a)2 (alteration requiring a variance in accordance with the Wetlands Protection Act).

Has this project been filed with MEPA before?

Yes (EOEA No. _____) No

Has any project on this site been filed with MEPA before?

Yes No

Is this an Expanded ENF (see 301 CMR 11.05(7)) requesting:

a Single EIR? (see 301 CMR 11.06(8))	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
a Special Review Procedure? (see 301CMR 11.09)	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
a Waiver of mandatory EIR? (see 301 CMR 11.11)	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
a Phase I Waiver? (see 301 CMR 11.11)	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

Identify any financial assistance or land transfer from an agency of the Commonwealth, including the agency name and the amount of funding or land area (in acres): Massport

Are you requesting coordinated review with any other federal, state, regional, or local agency?

Yes (Specify Federal Aviation Administration, U.S. Army Corps of Engineers, Massachusetts Department of Environmental Protection, Massachusetts Natural Heritage and Endangered Species Program, and Bedford Conservation Commission) No

List Local or Federal Permits and Approvals:

See Appendix A – Required Permits

Which ENF or EIR review threshold(s) does the project meet or exceed (see 301 CMR 11.03):

- | | | |
|---------------------------------|---------------------------------------|--|
| <input type="checkbox"/> Land | <input type="checkbox"/> Rare Species | <input checked="" type="checkbox"/> Wetlands, Waterways, & Tidelands |
| <input type="checkbox"/> Water | <input type="checkbox"/> Wastewater | <input type="checkbox"/> Transportation |
| <input type="checkbox"/> Energy | <input type="checkbox"/> Air | <input type="checkbox"/> Solid & Hazardous Waste |
| <input type="checkbox"/> ACEC | <input type="checkbox"/> Regulations | <input type="checkbox"/> Historical & Archaeological Resources |

Summary of Project Size & Environmental Impacts	Existing	Change	Total	State Permits & Approvals
LAND				
Total site acreage	32.5 Acres*			<input checked="" type="checkbox"/> Order of Conditions <input checked="" type="checkbox"/> Superseding Order of Conditions <input type="checkbox"/> Chapter 91 License <input checked="" type="checkbox"/> 401 Water Quality Certification <input type="checkbox"/> MHD or MDC Access Permit <input type="checkbox"/> Water Management Act Permit <input type="checkbox"/> New Source Approval <input type="checkbox"/> DEP or MWRA Sewer Connection/ Extension Permit <input checked="" type="checkbox"/> Other Permits <i>(including Legislative Approvals)</i> – Specify: _____
New acres of land altered		11.71 Acres*		
Acres of impervious area	7.88 acres*	None	7.88 acres*	
Square feet of new bordering vegetated wetlands alteration		91,413 SF (2.10 Acres)		
Square feet of new other wetland alteration		875 SF LUW (0.02 Acres); 410 LF Bank		
Acres of new non-water dependent use of tidelands or waterways		None		
STRUCTURES				
Gross square footage	N/A	N/A	N/A	
Number of housing units	N/A	N/A	N/A	
Maximum height (in feet)	N/A	N/A	N/A	
TRANSPORTATION				
Vehicle trips per day	N/A	N/A	N/A	
Parking spaces	N/A	N/A	N/A	
WATER/WASTEWATER				
Gallons/day (GPD) of water use	N/A	N/A	N/A	
GPD water withdrawal	N/A	N/A	N/A	
GPD wastewater generation/treatment	N/A	N/A	N/A	
Length of water/sewer mains (in miles)	N/A	N/A	N/A	

* Hanscom Field is approximately 1,300 acres; the project site, within which all work will occur, is approximately 32.5 acres. At the Runway 5 End, the project site is 12.2 acres, including approximately 3.70 acres impervious. At the Runway 23 End, the project site is 20.3 acres, including approximately 4.18 acres impervious. The project is on land previously filled as part of airport construction. No work is proposed within existing impervious areas (paved overruns at each runway end and a paved perimeter road at the Runway 5 End).

CONSERVATION LAND: Will the project involve the conversion of public parkland or other Article 97 public natural resources to any purpose not in accordance with Article 97?

Yes (Specify _____) No

Will it involve the release of any conservation restriction, preservation restriction, agricultural preservation restriction, or watershed preservation restriction?

Yes (Specify _____) No

RARE SPECIES: Does the project site include Estimated Habitat of Rare Species, Vernal Pools, Priority Sites of Rare Species, or Exemplary Natural Communities?

Yes (Specify *Priority Sites of Rare Species; see the Rare Species Section of this form.*) No

HISTORICAL/ARCHAEOLOGICAL RESOURCES: Does the project site include any structure, site or district listed in the State Register of Historic Place or the inventory of Historic and Archaeological Assets of the Commonwealth?

Yes (Specify _____) No

If yes, does the project involve any demolition or destruction of any listed or inventoried historic or archaeological resources?

Yes (Specify _____) No

The project site (including the Runway 5 and 23 End Safety Areas and adjacent land, as shown in attached figures) is neither adjacent nor proximate to known or listed historic and archaeological resources. Minute Man National Historic Park (MMNHP) is approximately one-third of a mile from the project site at its closest point.

AREAS OF CRITICAL ENVIRONMENTAL CONCERN: Is the project in or adjacent to an Area of Critical Environmental Concern?

Yes (Specify _____) No

PROJECT DESCRIPTION: The project description should include (a) a description of the project site, (b) a description of both on-site and off-site alternatives and the impacts associated with each alternative, and (c) potential on-site and off-site mitigation measures for each alternative (*You may attach one additional page, if necessary.*)

This project involves regrading and other improvements to runway safety areas in order to enhance safety at Hanscom Field and comply with FAA design standards. The improvements will not have any effect on normal runway operations, and there will be no runway expansion, no additional pavement, and no increase in capacity. The following narrative summarizes the project background, location, alternatives considered, proposed improvements, and mitigation measures. A more detailed discussion of these topics is provided in Section 1.0 of the attached Supplemental Documentation.

Background: A runway safety area (RSA) is a defined surface surrounding the runway and is prepared or suitable for reducing the risk of damage to aircraft in the event of an undershoot, an overshoot, or an excursion from the runway. An RSA also provides access to fire fighting and rescue equipment during such incidents. The Federal Aviation Administration (FAA) design standard for runway end safety areas (at airports with airplane design group C-III, including Hanscom) is 500 feet wide by 1,000 feet long. (See Section 1.0 of the Supplemental Documentation attached to this ENF.) The RSAs at the ends of Runways 5 and 23 at L. G. Hanscom Field do not currently meet FAA design standards, and the FAA has mandated that the safety areas be improved.

Location: Hanscom Field is located in the towns of Bedford, Concord, Lincoln and Lexington, as shown on the attached Location Map. Hanscom Field has two intersecting runways, designated as 11/29 and 5/23. Runway 5/23 is the secondary runway and is 150 feet wide by 5,106 feet long. The RSA improvements are located off each end of Runway 5/23, in the project site identified in the attached site plans. The Runway 5 End RSA is located within the towns of Concord and Lincoln, while the Runway 23 End RSA is entirely within the town of Bedford.

Description of Project Site:

Runway 5 End Project Site: The project site at the Runway 5 End, which includes the RSA and immediately adjacent land, is 12.2 acres and consists entirely of paved and turfed areas. The RSA is currently 500 feet wide, 520 feet long on the west edge and 845 feet long on the east edge, with a 200-foot wide paved overrun extending beyond the runway end. (See attached Runway 5 Existing Conditions Plan.) The safety area's topography is variable and not in compliance with FAA standards. The airport perimeter access road passes through the designated RSA around its perimeter. There are no wetlands near the limits of work or within the project site.

Runway 23 End Project Site: The project site at the Runway 23 End includes the RSA and immediately adjacent land, is 20.3 acres. The site consists of pavement, a gravel perimeter road, turfed areas, areas dominated by shrubs, and ditches. The RSA is currently 300 feet wide and 890 feet long, with a 200-foot wide paved overrun. (See attached Runway 23 Existing Conditions Plan.) The topography is variable and not in compliance with FAA standards. The existing airport perimeter access road is located just outside the currently designated RSA. The existing perimeter security fencing is located outside of the currently designated RSA, but traverses a portion of the proposed RSA. There is also a bordering vegetated wetland, wetland buffer and drainage ditches located within and immediately adjacent to the airport perimeter access road and RSA.

Alternatives Considered: In the Runway 5/23 Safety Area Supplementary Feasibility Analysis (2001) prepared by The Louis Berger Group, Inc. (Berger) for Massport and the FAA, six different alternatives were identified and evaluated. These included maintaining existing conditions with only minor grading; building the RSAs to meet FAA grading and dimensional standards (1,000 feet long x 500 feet wide); partial builds with varying runway threshold and RSA configurations; a runway shift to the north; and installing Engineered Materials Arresting Systems (EMAS). The alternatives are described in more detail in Section 1.5 of the Supplemental Documentation attached to this ENF.

In evaluating the alternatives, Berger, Massport and the FAA used the guidelines in FAA Order 5200.8 Appendix 2, which require reviewing historical records, airport plans, FAA standards compliance, site constraints, weather conditions, availability of visual and electronic aids for landing, and other factors. A summary of the findings for each of these evaluation criteria is included in Section 1.5 of the Supplemental Documentation. The selected alternative for Runway 5 is Alternative 1 (No Build), and for Runway 23 is Alternative 4 (Improve Existing). The FAA accepted these recommended improvements in a letter dated 29 March 2002 (attached as Appendix D). These alternatives bring the safety areas closer to compliance with FAA standards and enhance airplane/passenger safety. The alternatives have minor wetland impacts, require no vegetation removal outside of currently managed areas, and maintain the current runway lengths. Wetland mitigation will be implemented in conjunction with the selected alternative.

Proposed Improvements: The proposed improvements to the Runway 5/23 safety areas at Hanscom Field are intended to enhance the safety of airport users. Proposed improvements are shown on the attached Runway 5 Grading Plan, Runway 23 Site Plan, and Runway 23 Grading Plan.

The proposed improvements for the Runway 5 End RSA include:

- retain the paved overrun area in its current configuration;
- retain the size and shape of the RSA configuration; and
- regrade turfed areas which do not meet FAA design standards.

The proposed improvements at the Runway 23 End RSA include:

- retain the existing paved overrun in its current configuration;
- widen the existing RSA from 300 feet to 500 feet, with no increase in pavement or impervious area;
- grade the RSA to conform to FAA standards;
- relocate a portion of the perimeter access road to the edge of the RSA; and
- relocate the perimeter security fence in conjunction with road relocation.

Mitigation Measures: To mitigate for project-related impacts to wetlands, a comprehensive wetland compensation plan involving the restoration/creation of wetlands will be implemented. See Section 2.0 for a description of wetland mitigation requirements and potential sites.

LAND SECTION – all proponents must fill out this section

I. Thresholds / Permits

- A. Does the project meet or exceed any review thresholds related to **land** (see 301 CMR 11.03(1)) Yes No; if yes, specify each threshold:

None of the thresholds were exceeded.

II. Impacts and Permits

- A. Describe, in acres, the current and proposed character of the project site, as follows:

	Existing	Change	Total
Footprint of buildings	N/A	None	N/A
Roadways, parking, and other paved areas	N/A	None	N/A
Other altered areas (describe)	11.71*	0*	11.71*
Undeveloped areas	0*	0*	0*

** All of the land that will be affected by this project was previously altered. The Runway 5 End safety area includes an existing paved overrun, perimeter road, and mowed grass. The only land that will be affected is 2.47 acres of mowed grass, which will be regraded and retained as mowed grass. The Runway 23 End safety area includes a paved overrun (which will not be affected), a gravel perimeter road (which will be relocated), mowed grass, and areas dominated by shrubs (both uplands and wetlands). Approximately 6.27 acres of mowed grass will be regraded and retained as mowed grass. Another 2.60 acres of shrub-dominated land will be regraded and converted to mowed grass. See Section 1.0 of the Supplemental Documentation for more details on the current and proposed character of the site.*

- B. Has any part of the project site been in active agricultural use in the last three years?

Yes No; if yes, how many acres of land in agricultural use (with agricultural soils) will be converted to nonagricultural use?

- C. Is any part of the project site currently or proposed to be in active forestry use?

Yes No; if yes, please describe current and proposed forestry activities and indicate whether any part of the site is the subject of a DEM-approved forest management plan:

- D. Does any part of the project involve conversion of land held for natural resources purposes in accordance with Article 97 of the Amendments to the Constitution of the Commonwealth to any purpose not in accordance with Article 97? Yes No; if yes, describe:

- E. Is any part of the project site currently subject to a conservation restriction, preservation restriction, agricultural preservation restriction or watershed preservation restriction? Yes No; if yes, does the project involve the release or modification of such restriction? Yes No; if yes, describe:

- F. Does the project require approval of a new urban redevelopment project or a fundamental change in an existing urban redevelopment project under M.G.L.c.121A? Yes No; if yes, describe:

- G. Does the project require approval of a new urban renewal plan or a major modification of an existing urban renewal plan under M.G.L.c.121B? Yes No; if yes, describe:

- H. Describe the project's stormwater impacts and, if applicable, measures that the project will take to comply with the standards found in DEP's Stormwater Management Policy:

The stormwater impacts from this project will be negligible because there will be no net increase in impervious area. Best Management Practices for sedimentation and erosion control will be used during construction. In addition, the applicant will file for a Construction General Permit under the EPA NPDES program.

- I. Is the project site currently being regulated under M.G.L.c.21E or the Massachusetts Contingency Plan? Yes No X; if yes, what is the Release Tracking Number (RTN)?
- J. If the project site is within the Chicopee or Nashua watershed, is it within the Quabbin, Ware, or Wachusett subwatershed? Yes X No; if yes, is the project site subject to regulation under the Watershed Protection Act? Yes No

K. Describe the project's other impacts on land:

There are no impacts to land other than those described above.

III. Consistency

- A. Identify the current municipal comprehensive land use plan and the open space plan and describe the consistency of the project and its impacts with that plan(s):

Massport is not subject to local by-laws, ordinances, or plans. However, the project is in conformance with local land use plans, as described in detail below.

The runway safety area (RSA) improvements for Runway 5/23 involve activities in three towns: Bedford, Concord, and Lincoln. Each of the municipal plans is discussed below.

Bedford

The Town of Bedford's land use and open space plans are components of the Bedford Comprehensive Plan, dated December, 2002. The plan includes the following relevant goals.

***Chapter I, Goals and Policies** lists development goals for the community. Among these stated goals is "Maintain strong planning relationships with Bedford's large institutions including Hanscom" (Bedford Municipal Land Use Plan, Chapter 1, Goals and Policies, Section III, Land Use and Growth Management Goal). In this regard, the proposed runway safety area improvements will be coordinated with the Town of Bedford.*

***Chapter V, Natural Resources** lists goals related to preserving natural resources within the town. This chapter contains the following relevant goal: "Protect environmentally sensitive properties, including valuable water resources and unique wildlife habitat areas." The proposed work will not affect environmentally sensitive areas or unique wildlife habitat areas. The affected wetlands are previously disturbed and the vegetation is managed; also, wetland impacts will be fully mitigated. Nearby potential nesting habitat of upland sandpipers and grasshopper sparrows will not be affected.*

Concord

Concord is in the process of finalizing its "Concord's Long Range Plan for 2005-2020". The draft plan includes goals relating to transportation that specifically identify Hanscom Field and describe the two regional committees, the Hanscom Field Advisory Commission (HFAC) and the Hanscom Area Towns Committee (HATS), that coordinate activities at Hanscom with local municipalities. The plan includes the following:

*"**GOAL TC-3: Maintain involvement in Regional Transportation issues.***

***Objective TC-3.1** Participate in any future development of Massport's commercial areas at Hanscom Airport to maximize its benefits to our community and to minimize its adverse effects.*

Action TC-3.1.1 Work with HATS and other regional groups to develop traffic pattern models that reduce cut-through traffic in our Village Centers.

The proposed improvements to the Runway 5/23 safety areas are required to bring them closer to compliance with FAA standards, and do not conflict with the above stated objectives or action items. Massport will continue to work and coordinate with HATS and HFAC.

"GOAL NR-1: Preserve existing natural resources.

Objective NR- 1.4 Protect habitats of state listed species.

Action NR-1.4.3 Work with regional towns and agencies to identify and protect common wildlife, water and human corridors."

Although a portion of the project site within Concord is within an area identified as a "Priority Habitat" by the Massachusetts Natural Heritage and Endangered Species Program (NHESP), the proposed improvements will have no adverse effects on protected habitats or species. Massport has developed a Grassland Management Plan (reproduced in Appendix E) that has been reviewed and approved by NHESP.

Economic Development

The Long Range Plan does not iterate any specific goals relating to Hanscom Field. The Plan includes the following goal relating to economic development.

"GOAL ED-2. Provide a supportive environment that welcomes visitors and insures that all visitors receive a coordinated, positive experience."

Most of the action items related to this goal are specific to local transportation, and not to Hanscom Field. However, the necessary improvements to the runway safety areas will enhance safety for all Hanscom Field local and transient users.

Lincoln

Lincoln's current planning document is "Lincoln Logs the Future", published in 1991. This planning document does not state any specific goals with regard to Hanscom Field, but contains the following relevant information.

Part II, Task Force Reports: LAND USE: This section does not specifically recognize Hanscom Field and its land use role, except to note that zoning of certain land abutting Hanscom Field could be changed to allow for more commercial development to serve the people of Lincoln. However, it was noted that approximately 21% of the Town (i.e., 2000 acres) is in conservation, and this land use was encouraged to help maintain the rural atmosphere of the Town. The proposed improvements at Hanscom will not have any effect on the Town's land use goals, as the safety improvements will not affect any of the existing public open space or conservation land in Lincoln.

Part II, Task Force Reports: REGION: This section recognizes "Hanscom Complex" (Air Force Base and Field) as a positive economic force in the region. It does not state any goals specific to operations at Hanscom Field. However, this section does recognize the Hanscom Area Towns Study Committee (HATS) as a group that works with Massport to address and resolve specific issues. Massport will continue to work and coordinate with HATS.

- B. Identify the current Regional Policy Plan of the applicable Regional Planning Agency and describe the consistency of the project and its impacts with that plan:

Bedford, Concord, and Lincoln are all included in the Metropolitan Area Planning Council (MAPC). The Council has published “MetroPlan 2000, The Regional Development Plan for Metropolitan Boston”, which serves as a planning document for future development in the MAPC region. MetroPlan 2000 articulates recommendations for the region with regard to economic development, facility siting, housing, land resources, solid waste, transportation, water resources, and the planning process. A review of the relevant portions of these chapters follows.

Chapter A., Economic Development, provides guidance for continued economic development of the region, as described below:

“The goal of these recommendations is to preserve and enhance economic diversity within the region in order to reinforce the economic strength of the region and provide appropriate employment for its residents.”

The chapter does not make any more specific recommendations regarding Hanscom Field. However, providing for continued maintenance and safety improvements at Hanscom Field contributes to the economic strength of the region.

Chapter G., Water Resources, identifies the preservation of wetlands as a priority.

Action Recommendation W # 6

“Protect and restore wetlands resources in the region. Over half of the natural wetlands of the region have been filled or altered. Although the rate of wetlands loss has been slowed in the last two decades by state and local wetlands protection regulations, wetlands are still being lost and many valuable wetland resources remain at risk.”

“Objective: To prevent further loss of wetlands, and where possible, to restore degraded wetlands.

Implementation: MAPC to implement policy of no net loss of wetlands, as currently defined by state law. Under this policy, protection of wetlands will be in accordance with the following guidelines, which establishes a hierarchy of actions. This policy will be applied to all MAPC reviews, and communities will be encouraged to implement it at the local level:

- A) Avoid wetlands losses and impacts unless no feasible alternative exists.
- B) Minimize wetlands losses and impacts if total avoidance is not feasible.
- C) Mitigate wetlands losses and impacts after all feasible steps have been taken to avoid and minimize wetlands losses. Lost wetlands resources shall be restored or replicated based on wetland function and acreage.”

The proposed runway safety area improvements will involve the alteration of approximately 2.10 acres of Bordering Vegetated Wetlands and 0.02 acres of Land Under Water. Wetland impacts will be mitigated in accordance with State and Federal

guidelines regarding the compensation of affected acreage and functions.

Chapter H. of the MetroPlan, “Planning Process”, includes the following Action Recommendation:

Action Recommendation P #2

“Using MetroPlan 2000 as the regional development plan and as a vision for the future, develop a system of regional priorities for those types of infrastructure that influence and accommodate growth and reinforce present concentrations of activity in the regional economic core and other areas designated by the plan; especially including wastewater and services, transportation, housing and the protection of open space and environmentally sensitive lands.”

“Objective: To encourage growth in areas designated by the plan; to discourage sprawl; to make the most efficient use of existing infrastructure in the region and to minimize the cost of providing and maintaining infrastructure to serve existing and new development. To develop a comprehensive plan for transportation investments and services which can achieve regional mobility and improved quality of life within environmental and fiscal constraints.”

Hanscom Field is an important part of the existing regional transportation infrastructure, and the ongoing maintenance and required safety area improvements of the runways are consistent with the above objective.

- C. Will the project require any approvals under the local zoning by-law or ordinance (i.e. text or map amendment, special permit, or variance)? Yes No X; if yes, describe:

This project is exempt from local zoning by-laws and ordinances.

- D. Will the project require local site plan or project impact review?
Yes No X; if yes, describe:

This project is exempt from local site plan review.

RARE SPECIES SECTION

I. Thresholds / Permits

- A. Will the project meet or exceed any review thresholds related to **rare species or habitat** (see 301 CMR 11.03(2))? Yes No ; if yes, specify, in quantitative terms:

*Based on the MA Natural Heritage Atlas [MA Natural Heritage and Endangered Species Program (NHESP); 11th Edition; Valid July 1, 2003], approximately 6.33 acres of the project site is within Priority Habitat 459. However, no takings of endangered or threatened species or species of special concern are anticipated to result from project implementation. The rare species that have been observed at Hanscom Field within other areas of Priority Habitat are the Upland Sandpiper (*Bartramia longicauda*, state-endangered) and Grasshopper Sparrow (*Ammodramus savannarum*, state-threatened). The Grassland Management Plan (attached herein as Appendix E) prepared by Massport and published in 2004 shows that the Runway 5 and 23 safety areas are not managed for grassland bird breeding habitat and are mowed frequently to discourage nesting. Accordingly, proposed safety area improvements will not result in the 'taking' of rare bird species or their habitat.*

*Three other listed species have been observed on property near, but not on Hanscom Field. These species are the eastern box turtle (*Terrapene carolina*), the elderberry long horned beetle (*Desmocerus palliatus*), and the Mystic Valley amphipod (*Crangonyx aberrans*). The eastern box turtle and the elderberry long horned beetle are listed as species of special concern. As these two listed species are not known to occur on Hanscom Field, it is not anticipated they will be affected by the proposed runway safety area improvements. The Mystic Valley amphipod was previously a species of special concern, but has since been de-listed.*

- B. Does the project require any state permits related to **rare species or habitat**? Yes No

- C. If you answered "No" to both questions A and B, proceed to the **Wetlands, Waterways, and Tidelands Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Rare Species section below.

II. Impacts and Permits

- A. Does the project site fall within Priority or Estimated Habitat in the current Massachusetts Natural Heritage Atlas (attach relevant page)? Yes No. If yes,

1. Which rare species are known to occur within the Priority or Estimated Habitat (contact: Environmental Review, Natural Heritage and Endangered Species Program, Route 135, Westborough, MA 01581, allowing 30 days for receipt of information):

See Section I above.

2. Have you surveyed the site for rare species? Yes No; if yes, please include the results of your survey.

The Massachusetts Audubon Society observed Hanscom Field from 1993-1998 for upland sandpipers and grasshopper sparrows, and participates in annual monitoring.

3. If your project is within Estimated Habitat, have you filed a Notice of Intent or received an Order of Conditions for this project? Yes No; if yes, did you send a copy of the Notice of Intent to the Natural Heritage and Endangered Species Program, in accordance with the Wetlands Protection Act regulations? Yes No

- B. Will the project "take" an endangered, threatened, and/or species of special concern in accordance with M.G.L. c.131A (see also 321 CMR 10.04)? Yes No; if yes,

describe:

Since the project site does not include rare bird breeding habitat, and no other endangered, threatened, or special concern species have been observed at the site, the proposed project is not expected to result in the taking of rare species. See Section I above.

C. Will the project alter "significant habitat" as designated by the Massachusetts Division of Fisheries and Wildlife in accordance with M.G.L. c.131A (see also 321 CMR 10.30)? Yes
X No; if yes, describe:

D. Describe the project's other impacts on rare species including indirect impacts (for example, stormwater runoff into a wetland known to contain rare species or lighting impacts on rare moth habitat):

No impacts to rare species are anticipated.

WETLANDS, WATERWAYS, AND TIDELANDS SECTION

I. Thresholds / Permits

A. Will the project meet or exceed any review thresholds related to **wetlands, waterways, and tidelands** (see 301 CMR 11.03(3))? Yes _____ No; if yes, specify, in quantitative terms:

The project will exceed two of the Mandatory EIR review thresholds in conjunction with the Runway 23 End safety area improvements. The Mandatory EIR thresholds to be exceeded are:

- *Alteration of more than 1 acre of a bordering vegetated wetland; and*
- *The need for a MA DEP Variance under the MA Wetlands Protection Act regulations.*

B. Does the project require any state permits (or a local Order of Conditions) related to **wetlands, waterways, or tidelands?** Yes _____ No; if yes, specify which permit:

For the Runway 23 End Wetland Impact:

- *Bedford Conservation Commission – Order of Conditions*
- *MA DEP – Superseding Order of Conditions*
- *MA DEP – Variance and Final Order of Conditions*
- *MA DEP – Individual Water Quality Certification*

C. If you answered "No" to both questions A and B, proceed to the **Water Supply Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Wetlands, Waterways, and Tidelands Section below.

II. Wetlands Impacts and Permits

A. Describe any wetland resource areas currently existing on the project site and indicate them on the site plan:

See Section 2.0 of the Supplemental Documentation.

B. Estimate the extent and type of impact that the project will have on wetland resources, and indicate whether the impacts are temporary or permanent:

<u>Coastal Wetlands`</u>	<u>Area (in square feet) or Length (in linear feet)</u>
Land Under the Ocean	N/A
Designated Port Areas	N/A
Coastal Beaches	N/A
Coastal Dunes	N/A
Barrier Beaches	N/A
Coastal Banks	N/A
Rocky Intertidal Shores	N/A
Salt Marshes	N/A
Land Under Salt Ponds	N/A
Land Containing Shellfish	N/A
Fish Runs	N/A
Land Subject to Coastal Storm Flowage	N/A

<u>Inland Wetlands</u>	
Bank	410 LF
Bordering Vegetated Wetlands	91,413 SF (2.10 Acres)
Land under Water	875 SF (0.02 Acres)
Isolated Land Subject to Flooding	None
Bordering Land Subject to Flooding	None
Riverfront Area	None

C. Is any part of the project

1. a limited project? _____ Yes No

2. the construction or alteration of a dam? Yes No; if yes, describe:
3. fill or structure in a velocity zone or regulatory floodway? Yes No
4. dredging or disposal of dredged material? Yes No; if yes, describe the volume of dredged material and the proposed disposal site:

There will be minor removal, regrading, and replacement of existing soils in order to meet FAA safety area requirements. Since existing soils in affected bordering vegetated wetlands are not suitable for runway safety area requirements, they will be replaced by structurally competent material. Disposal locations will be in accordance with all applicable regulations and statutes.

5. a discharge to Outstanding Resource Waters? Yes No
6. subject to a wetlands restriction order? Yes No; if yes, identify the area (in square feet):

D. Does the project require a new or amended Order of Conditions under the Wetlands Protection Act (M.G.L. c.131A)? Yes No; if yes, has a Notice of Intent been filed or a local Order of Conditions issued? Yes No; if yes, list the date and DEP file number: _____.
Was the Order of Conditions appealed? Yes No. Will the project require a variance from the Wetlands regulations? Yes No.

E. Will the project:

1. be subject to a local wetlands ordinance or bylaw? Yes No
2. alter any federally-protected wetlands not regulated under state or local law?
 Yes No; if yes, what is the area (in s.f.)?

F. Describe the project's other impacts on wetlands (including new shading of wetland areas or removal of tree canopy from forested wetlands):

No other wetland impacts are anticipated.

III. Waterways and Tidelands Impacts and Permits

A. Is any part of the project site waterways or tidelands (including filled former tidelands) that are subject to the Waterways Act, M.G.L.c.91? Yes No; if yes, is there a current Chapter 91 license or permit affecting the project site? Yes No; if yes, list the date and number:

B. Does the project require a new or modified license under M.G.L.c.91? Yes No; if yes, how many acres of the project site subject to M.G.L.c.91 will be for non-water dependent use?
Current _____ Change _____ Total _____

C. Is any part of the project

1. a roadway, bridge, or utility line to or on a barrier beach? Yes No; if yes, describe:
2. dredging or disposal of dredged material? Yes No; if yes, volume of dredged material _____
3. a solid fill, pile-supported, or bottom-anchored structure in flowed tidelands or other waterways? Yes No; if yes, what is the base area? _____
4. within a Designated Port Area? Yes No

D. Describe the project's other impacts on waterways and tidelands:

IV. Consistency:

- A. Is the project located within the Coastal Zone? Yes No; if yes, describe the project's consistency with policies of the Office of Coastal Zone Management:
- B. Is the project located within an area subject to a Municipal Harbor Plan? Yes No; if yes, identify the Municipal Harbor Plan and describe the project's consistency with that plan:

WATER SUPPLY SECTION

I. Thresholds / Permits

- A. Will the project meet or exceed any review thresholds related to **water supply** (see 301 CMR 11.03(4))? Yes No; if yes, specify, in quantitative terms:
- B. Does the project require any state permits related to **water supply**? Yes No; if yes, specify which permit:
- C. If you answered "No" to both questions A and B, proceed to the **Wastewater Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Water Supply Section below.

II. Impacts and Permits

- A. Describe, in gallons/day, the volume and source of water use for existing and proposed activities at the project site:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Withdrawal from groundwater	_____	_____	_____
Withdrawal from surface water	_____	_____	_____
Interbasin transfer	_____	_____	_____
Municipal or regional water supply	_____	_____	_____

- B. If the source is a municipal or regional supply, has the municipality or region indicated that there is adequate capacity in the system to accommodate the project? Yes No

- C. If the project involves a new or expanded withdrawal from a groundwater or surface water source,

1. have you submitted a permit application? Yes No; if yes, attach the application
2. have you conducted a pump test? Yes No; if yes, attach the pump test report

- D. What is the currently permitted withdrawal at the proposed water supply source (in gallons/day)?
_____ Will the project require an increase in that withdrawal? Yes No

- E. Does the project site currently contain a water supply well, a drinking water treatment facility, water main, or other water supply facility, or will the project involve construction of a new facility? Yes No. If yes, describe existing and proposed water supply facilities at the project site:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Water supply well(s) (capacity, in gpd)	_____	_____	_____
Drinking water treatment plant (capacity, in gpd)	_____	_____	_____
Water mains (length, in miles)	_____	_____	_____

- F. If the project involves any interbasin transfer of water, which basins are involved, what is the direction of the transfer, and is the interbasin transfer existing or proposed?

- G. Does the project involve

1. new water service by a state agency to a municipality or water district? Yes No
2. a Watershed Protection Act variance? Yes No; if yes, how many acres of alteration?
3. a non-bridged stream crossing 1,000 or less feet upstream of a public surface drinking water supply for purpose of forest harvesting activities? Yes No

- H. Describe the project's other impacts (including indirect impacts) on water resources, quality, facilities and services:

- III. Consistency** -- Describe the project's consistency with water conservation plans or other plans to enhance water resources, quality, facilities and services:

WASTEWATER SECTION

I. Thresholds / Permits

A. Will the project meet or exceed any review thresholds related to **wastewater** (see 301 CMR 11.03(5))? Yes No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **wastewater**? Yes No; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Transportation -- Traffic Generation Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Wastewater Section below.

II. Impacts and Permits

A. Describe, in gallons/day, the volume and disposal of wastewater generation for existing and proposed activities at the project site (calculate according to 310 CMR 15.00):

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Discharge to groundwater (Title 5)	_____	_____	_____
Discharge to groundwater (non-Title 5)	_____	_____	_____
Discharge to outstanding resource water	_____	_____	_____
Discharge to surface water	_____	_____	_____
Municipal or regional wastewater facility	_____	_____	_____
TOTAL	_____	_____	_____

B. Is there sufficient capacity in the existing collection system to accommodate the project? Yes No; if no, describe where capacity will be found:

C. Is there sufficient existing capacity at the proposed wastewater disposal facility? Yes No; if no, describe how capacity will be increased:

D. Does the project site currently contain a wastewater treatment facility, sewer main, or other wastewater disposal facility, or will the project involve construction of a new facility? Yes No. If yes, describe as follows:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Wastewater treatment plant (capacity, in gpd)	_____	_____	_____
Sewer mains (length, in miles)	_____	_____	_____
Title 5 systems (capacity, in gpd)	_____	_____	_____

E. If the project involves any interbasin transfer of wastewater, which basins are involved, what is the direction of the transfer, and is the interbasin transfer existing or proposed?

F. Does the project involve new sewer service by an Agency of the Commonwealth to a municipality or sewer district? Yes No

G. Is there any current or proposed facility at the project site for the storage, treatment, processing, combustion or disposal of sewage sludge, sludge ash, grit, screenings, or other sewage residual materials? Yes No; if yes, what is the capacity (in tons per day):

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Storage	_____	_____	_____
Treatment, processing	_____	_____	_____
Combustion	_____	_____	_____
Disposal	_____	_____	_____

H. Describe the project's other impacts (including indirect impacts) on wastewater generation and treatment facilities:

III. Consistency -- Describe measures that the proponent will take to comply with federal, state, regional, and local plans and policies related to wastewater management:

A. If the project requires a sewer extension permit, is that extension included in a comprehensive wastewater management plan? Yes No; if yes, indicate the EOEA number for the plan and describe the relationship of the project to the plan

TRANSPORTATION -- TRAFFIC GENERATION SECTION

I. Thresholds / Permits

A. Will the project meet or exceed any review thresholds related to **traffic generation** (see 301 CMR 11.03(6))? Yes X No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **state-controlled roadways**? Yes X No; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Roadways and Other Transportation Facilities Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Traffic Generation Section below.

II. Traffic Impacts and Permits

A. Describe existing and proposed vehicular traffic generated by activities at the project site:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Number of parking spaces	_____	_____	_____
Number of vehicle trips per day	_____	_____	_____

ITE Land Use Code(s):

B. What is the estimated average daily traffic on roadways serving the site?

<u>Roadway</u>	<u>Existing</u>	<u>Change</u>	<u>Total</u>
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____

C. Describe how the project will affect transit, pedestrian and bicycle transportation facilities and services:

III. Consistency -- Describe measures that the proponent will take to comply with municipal, regional, state, and federal plans and policies related to traffic, transit, pedestrian and bicycle transportation facilities and services:

ROADWAYS AND OTHER TRANSPORTATION FACILITIES SECTION

I. Thresholds

A. Will the project meet or exceed any review thresholds related to **roadways or other transportation facilities** (see 301 CMR 11.03(6))? Yes X No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **roadways or other transportation facilities**? Yes X No; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Energy Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Roadways Section below.

II. Transportation Facility Impacts

A. Describe existing and proposed transportation facilities at the project site:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Length (in linear feet) of new or widened roadway	_____	_____	_____
Width (in feet) of new or widened roadway	_____	_____	_____

Other transportation facilities:

B. Will the project involve any

1. Alteration of bank or terrain (in linear feet)? _____
2. Cutting of living public shade trees (number)? _____
3. Elimination of stone wall (in linear feet)? _____

III. Consistency -- Describe the project's consistency with other federal, state, regional, and local plans and policies related to traffic, transit, pedestrian and bicycle transportation facilities and services, including consistency with the applicable regional transportation plan and the Transportation Improvements Plan (TIP), the State Bicycle Plan, and the State Pedestrian Plan:

ENERGY SECTION

I. Thresholds / Permits

- A. Will the project meet or exceed any review thresholds related to **energy** (see 301 CMR 11.03(7))?
____ Yes No; if yes, specify, in quantitative terms:
- B. Does the project require any state permits related to **energy**? ____ Yes No; if yes, specify which permit:
- C. If you answered "No" to both questions A and B, proceed to the **Air Quality Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Energy Section below.

II. Impacts and Permits

- A. Describe existing and proposed energy generation and transmission facilities at the project site:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Capacity of electric generating facility (megawatts)	_____	_____	_____
Length of fuel line (in miles)	_____	_____	_____
Length of transmission lines (in miles)	_____	_____	_____
Capacity of transmission lines (in kilovolts)	_____	_____	_____

- B. If the project involves construction or expansion of an electric generating facility, what are
1. the facility's current and proposed fuel source(s)?
 2. the facility's current and proposed cooling source(s)?

- C. If the project involves construction of an electrical transmission line, will it be located on a new, unused, or abandoned right of way? ____ Yes ____ No; if yes, please describe:

- D. Describe the project's other impacts on energy facilities and services:

III. Consistency -- Describe the project's consistency with state, municipal, regional, and federal plans and policies for enhancing energy facilities and services:

AIR QUALITY SECTION

I. Thresholds

- A. Will the project meet or exceed any review thresholds related to **air quality** (see 301 CMR 11.03(8))? Yes X No; if yes, specify, in quantitative terms:
- B. Does the project require any state permits related to **air quality**? Yes X No; if yes, specify which permit:
- C. If you answered "No" to both questions A and B, proceed to the **Solid and Hazardous Waste Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Air Quality Section below.

II. Impacts and Permits

- A. Does the project involve construction or modification of a major stationary source (see 310 CMR 7.00, Appendix A)? Yes No; if yes, describe existing and proposed emissions (in tons per day) of:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Particulate matter	_____	_____	_____
Carbon monoxide	_____	_____	_____
Sulfur dioxide	_____	_____	_____
Volatile organic compounds	_____	_____	_____
Oxides of nitrogen	_____	_____	_____
Lead	_____	_____	_____
Any hazardous air pollutant	_____	_____	_____
Carbon dioxide	_____	_____	_____

- B. Describe the project's other impacts on air resources and air quality, including noise impacts:

III. Consistency

- A. Describe the project's consistency with the State Implementation Plan:
- B. Describe measures that the proponent will take to comply with other federal, state, regional, and local plans and policies related to air resources and air quality:

SOLID AND HAZARDOUS WASTE SECTION

I. Thresholds / Permits

- A. Will the project meet or exceed any review thresholds related to **solid or hazardous waste** (see 301 CMR 11.03(9))? Yes X No; if yes, specify, in quantitative terms:
- B. Does the project require any state permits related to **solid and hazardous waste**? Yes X No; if yes, specify which permit:
- C. If you answered "No" to both questions A and B, proceed to the **Historical and Archaeological Resources Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Solid and Hazardous Waste Section below.

II. Impacts and Permits

- A. Is there any current or proposed facility at the project site for the storage, treatment, processing, combustion or disposal of solid waste? Yes No; if yes, what is the volume (in tons per day) of the capacity:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Storage	_____	_____	_____
Treatment, processing	_____	_____	_____
Combustion	_____	_____	_____
Disposal	_____	_____	_____

- B. Is there any current or proposed facility at the project site for the storage, recycling, treatment or disposal of hazardous waste? Yes No; if yes, what is the volume (in tons or gallons per day) of the capacity:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Storage	_____	_____	_____
Recycling	_____	_____	_____
Treatment	_____	_____	_____
Disposal	_____	_____	_____

- C. If the project will generate solid waste (for example, during demolition or construction), describe alternatives considered for re-use, recycling, and disposal:

- D. If the project involves demolition, do any buildings to be demolished contain asbestos?
Yes No

- E. Describe the project's other solid and hazardous waste impacts (including indirect impacts):

III. Consistency--Describe measures that the proponent will take to comply with the State Solid Waste Master Plan:

HISTORICAL AND ARCHAEOLOGICAL RESOURCES SECTION

I. Thresholds / Impacts

A. Is any part of the project site a historic structure, or a structure within a historic district, in either case listed in the State Register of Historic Places or the Inventory of Historic and Archaeological Assets of the Commonwealth? Yes No; if yes, does the project involve the demolition of all or any exterior part of such historic structure? Yes No; if yes, please describe:

The project site (the Runway 5 and 23 End Safety Areas and adjacent land, shown in the attached figures) is neither adjacent nor proximate to known or listed historic resources. Minute Man National Historic Park (MMNHP) is approximately one-third of a mile from the site at its closest point.

B. Is any part of the project site an archaeological site listed in the State Register of Historic Places or the Inventory of Historic and Archaeological Assets of the Commonwealth? Yes No; if yes, does the project involve the destruction of all or any part of such archaeological site? Yes No; if yes, please describe:

C. If you answered "No" to all parts of both questions A and B, proceed to the **Attachments and Certifications** Sections. If you answered "Yes" to any part of either question A or question B, fill out the remainder of the Historical and Archaeological Resources Section below.

D. Have you consulted with the Massachusetts Historical Commission? Yes No; if yes, attach correspondence

E. Describe and assess the project's other impacts, direct and indirect, on listed or inventoried historical and archaeological resources:

II. Consistency -- Describe measures that the proponent will take to comply with federal, state, regional, and local plans and policies related to preserving historical and archaeological resources:

CERTIFICATIONS:

1. The Public Notice of Environmental Review has been/will be published in the following newspapers in accordance with 301 CMR 11.15(1):

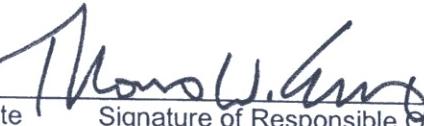
(Name)

(Date)

The Boston Globe

August 8, 2005

2. This form has been circulated to Agencies and Persons in accordance with 301 CMR 11.16(2).



Date Signature of Responsible Officer
7-28-05 or Proponent

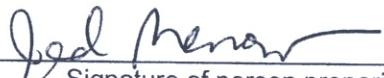
Thomas Ennis, Senior Project Manager
Name (print or type)

Massachusetts Port Authority
Firm/Agency

Logan Office Center, One Harborside Drive
Street

East Boston, MA 02128
Municipality/State/Zip

(617) 568-3546
Phone



Date Signature of person preparing
7-28-05 ENF (if different from above)

Jed S. Merrow, Sr. Environmental Analyst
Name (print or type)

McFarland-Johnson, Inc.
Firm/Agency

Concord Center, Suite 210 – 10 Ferry St.
Street

Concord, NH 03301
Municipality/State/Zip

(603) 225-2978
Phone